

REMARKS

By this amendment, claims 1-23 are pending, in which claims 19-23 are newly presented. Paragraph 22 of specification is amended to correct a typographical error. Entry is respectfully requested, as care was exercised to avoid the introduction of new matter.

The Office Action mailed August 19, 2004 rejected claims 1-2, 11-14, and 16-18 under 35 U.S.C. § 102 as anticipated by *Wang et al.* (US 6,167,084), claims 1-2, 5, and 13-18 under *Gordon et al.* (US 6,621,870), claims 1-2, 11-14, and 16-18 under *Wu et al.* (US 6,731,684), claims 3, 11-12, and 16 as obvious under 35 U.S.C. § 103 based on *Gordon et al.* in view of *Carnahan et al.* (US 5,414,780), claims 9-10 and 16 over *Gordon et al.* and the commonly-assigned *Banerji* (US 6,400,289), claims 6-7 and 16 over *Gordon et al.* over *Kato et al.* (US 5,719,986), and claims 8 and 16 over *Gordon et al.* and *Weinberger et al.* (US 5,680,129).

The Office Action does not set forth a rejection for dependent claim 4, which is therefore presumptively allowed pursuant to 37 CFR § 1.104(b) and (c)(1), which provide: "The examiner's action will be complete as to all matters If the invention is not considered patentable, or not considered patentable as claimed, the claims, or those considered unpatentable will be rejected." An explicit clarification as to the status of claim 4 is respectfully requested.

The rejection of 9-10 and 16 over *Gordon et al.* and the commonly-assigned *Banerji* is respectfully traversed because *Banerji* is not available as a reference under 35 U.S.C. § 103(c). Specifically, this subsection of the statute provides:

(c) Subject matter developed by another person, which qualifies as prior art only under subsection (e), (f), or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention as made, owned by the same person or subject to an obligation of assignment to the same person.

The present application was filed on February 12, 2002, which is before the June 4, 2002, issue date of *Banerji*. Thus, *Banerji* would qualify, if at all, as prior art only under subsections (e), (f), or (g) of 35 U.S.C. § 102. Since both the present application and *Banerji* were commonly assigned (to Hughes Electronics Corp.) at the time the invention was made, the use of *Banerji* in this obviousness rejection is disallowed by law. Therefore, the withdrawal of the rejection of claims 9-10 and 16 over *Gordon et al.* and *Banerji* is respectfully solicited.

The rejection of claims 1-2, 5, and 13-18 over *Gordon et al.* is respectfully traversed because *Gordon et al.* fails to disclose the features of claims 1-2, 5, and 13-18. For example, independent claims 1 and 17 recite “grouping video frames that are between consecutive I-frames into a video data set.” This feature, in combination with the recited features of “splitting the video data set into a plurality of homogeneous files” and “individually compressing each of the homogeneous files,” are not shown in *Gordon et al.*

Gordon et al. is directed to a method and apparatus for compressing video sequences (Title), in which “each sequence has information common with other video sequences” (col. 2:33-34), such as an interactive program guide (IPG). Referring now to FIG. 2 and accompanying text in col. 6:14-19, *Gordon et al.* states: “The video sequences V1-V10 are coupled to respective real time encoders 220. Each encoder 220 encodes, illustratively, a composited IPG screen sequence to form a corresponding compressed video bit stream, e.g., an MPEG-2 compliant bit stream having associated with it a predefined group of pictures (GOP) structure.” The Office Action reads the recited feature of “individually compressing” on real-time encoders 220, but *Gordon et al.* fails to disclose any “video frames that are between consecutive I-frames” in the video sequence V1-V10, much less any grouping of such frames prior to real-time encoders 220. *Gordon et al.* has no disclosure, moreover, of the “splitting” and “individual compressing” features of the encoded bit-stream E1-E10 produced by the real-time encoders 220, respectively.

Furthermore, the Office Action, p. 4, asserts that *Gordon et al.* discloses “splitting (116 of fig 2, note encoding and multiplexing unit splits the video data set into file VIDEO 1, VIDEO 2 VIDEO 10 of fig. 2),” but the implementation of encoding and multiplexing unit 116 is shown in FIG. 2, and VIDEO 1 through VIDEO 10 are shown to be inputs, not outputs, of the encoding and multiplexing unit 116.

Since dependent claims 2, 5, 13-16, and 18 include the features of their independent claims, the rejection of claims 1-2, 5, and 13-18 as anticipated by *Gordon et al.* does not have the necessary factual basis required by law and should be withdrawn.

In addition, the rejection of claims 3, 6-8, 11-12, and 16 over *Gordon et al.* in view of *Carnahan et al.*, *Kato et al.*, or *Weinberger et al.* are respectfully traversed because *Gordon et al.* lacks disclosure for the “grouping” feature, as argued above, and the secondary references do not cure this factual deficiency.

The rejection of claims 1-2, 11-14, and 16-18 over *Wang et al.* is similarly infirm. The Office Action reads the feature of “individual compressing” (recited in independent claims 1 and 17) on MPEG encoders 620 and 630 of FIG. 6. However, *Wang et al.* does not show the presence of “video frames that are between consecutive I-frames” in the video inputs to MPEG encoders 620 and 630, not to mention any grouping of such frames prior to MPEG encoders 620 and 630. Significantly, the portion of *Wang et al.* cited in the Office Action allegedly for disclosure of I-frames, namely col. 8:25-36, only discussed the output of MPEG encoding. Furthermore, FIG. 6 of *Wang et al.* does not disclose splitting the video data, because PROGRAM 1, PROGRAM 2, etc. are inputs, not outputs. Because of *Wang et al.*’s infirmity in disclosing facts relevant to the features of claims 1-2, 11-14, and 16-18, the rejection of these over *Wang et al.* should be withdrawn.

Wu et al. also does not support the rejection of claims 1-2, 11-14, and 16-18. *Wu et al.* describes a High-Definition Television (HDTV) encoder that includes an HDTV panel splitter 110 for splitting an input HDTV picture into a eight panels (FIG. 1; col. 3:48-51, 65-66). Each panel is compressed by a corresponding video compressor 120-127. FIG. 2 shows the implementation of a video compressor (200) with an MPEG encoding stage 225 upon which the Office Action reads the “individually compressing” recitation of independent claims 1 and 17. There is no disclosure in *Wu et al.* that the HDTV video signal input into HDTV panel splitter and ultimately as the input the preprocessing stage 205 of video compressors 120-127 contains any “video frames that are between consecutive I-frames” that could be grouped. Furthermore, there is no disclosure in *Wu et al.* of any “splitting the video data set” and “individually compressing” after the preprocessing stage 205. Accordingly, withdrawal of the rejection of claims 1-2, 11-14, and 16-18 over *Wu et al.* is also requested.

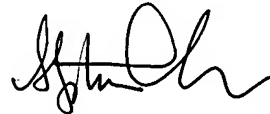
Dependent claims 2-16 and 18 are allowable for at least the same reasons as their independent claims from which they depend and are individually patentable on their own merits. For example, claim 11 recites “bit plane encoding quantized transform coefficients obtained from the video data set.” The Office Action, pp. 3 6, asserts that *Wang et al.* and *Wu et al.* disclose this feature merely because “each MPEG-ENCODER includes DCT and Q,” but neither reference teaches or suggests actually performing a “**bit plane encoding**” DCT and Q.

Newly presented claims 19-23 are also patentable over the applied art of record. For example, neither *Gordon et al.*, *Wang et al.*, *Wu et al.*, nor the secondary references disclose the features of “video

frames that are only between two consecutive I-frames" in independent claim 19; "individually compressing each of the data sequences, wherein at least one of the data sequences contains information from each of the non-intra video frames" of independent claim 21; or "grouping video frames of the video signal that are between consecutive I-frames into a video data set" of independent claim 22.

Therefore, the present application, as amended, overcomes the objections and rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at (301) 428-7172 so that such issues may be resolved as expeditiously as possible. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



Stephen C. Carlson
Attorney for Applicant
Registration No. 39,929

HUGHES ELECTRONICS CORPORATION
Patent Docketing Administration
P.O. Box 956
Bldg. 1, Mail Stop A109
El Segundo, CA 90245-0956